

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)		Document Number 20050515.ORI	Application Number 10/534,088
		Applicant Naomi Chayen et al	
		Filing Date May 6, 2005	Group Art Unit 1722

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
F.H.	4,171,544	10/23/79	Hench et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES	NO
F.H.	WO 02/088435	11/07/02	WIPO				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

F.H. ↑	Blow et al, PROTEIN SCIENCE, Control of Nucleation of Protein Crystals, Vol. 3, 1994, pp. 1638-1643
	Chayen et al, J. APPL. CRYST. An Automated System for Micro-Batch Protein Crystallization and Screening, Vol. 23, 1990, pp. 297-302
	Chayen et al, JOURNAL OF CRYSTAL GROWTH, Microbatch Crystallization Under Oil - A New Technique Allowing Many Small-volume Crystallization Trials, Vol. 122, 1992, pp. 176-180
	Chayen et al, JOURNAL OF CRYSTAL GROWTH, Is Lysozyme Really the Ideal Model Protein?, Vol. 232, 2001, pp. 262-264
	Chayen et al, PROTEIN SCIENCE, Control of Nucleation in the Crystallization of Lysozyme, Vol. 2, 1993, pp. 113-118
	Coleman & Hench, CERAMICS INTERNATIONAL, A Gel-derived mesoporous Silica Reference Material for Surface Analysis by Gas Sorption, Vol. 26, 2000, pp. 171-178
	Cook et al, KEY ENGINEERING MATERIALS, Pore Characterisation and Interconnectivity Studies on bioactive 58 S Sol-Gel Glass, Vols. 192-195, 2001, pp. 625-628
	D'Arcy et al, JOURNAL OF CRYSTAL GROWTH, A Novel Approach to Crystallising Proteins Under Oil, Vol. 168, 1996, pp. 175-180
F.H. ↓	Dusastre, NATURE, Pore Characterization, Vol. 408, 2000, p. 417
	Feher & Kam, METHODS ENZYMOLOGY, Nucleation and Growth of Protein Crystals: General Principles and Assays, Vol. 114, 1985, pp. 77-112

EXAMINER <i>J. Hench</i>	DATE CONSIDERED <i>8/28/06</i>
-----------------------------	-----------------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)		Document Number 20050515.ORI	Application Number 10/019,520
		Applicant Naomi Chayen et al	
		Filing Date May 6, 2005	Group Art Unit 1722

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
------------------	-----------------	------	------	-------	----------	----------------------------

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES NO
--	-----------------	------	---------	-------	----------	-------------------------

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

F.H. A V F.H.	Hench & West, LIFE CHEMISTRY REPORTS, Biological Applications of Bioactive Glasses, Vol. 13, 1996, pp. 187-241
	Hench, CURRENT OPINION IN SOLID STATE & MATERIALS SCIENCE, Sol-gel Materials for Bioceramic Applications, Vol. 2, 1997, pp. 604-610
	Hench & West, CHEM. REV., The Sol-Gel Process, Vol. 90, 1990, pp. 33-72
	http://proteome.bnl.gov/progress.html , Progress toward structure solution by X-ray Crystallography, January 18, 2005, pp. 1-3
	Lenza et al, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, Surface-modified 3D Scaffolds for Tissue Engineering, Vol. 13, 2002, pp. 837-842
	Li et al, JOURNAL OF APPLIED BIOMATERIALS, An Investigation of Bioactive Glass Powders by Sol-Gel Processing, Vol. 2, 1991, pp. 231-239
	Li et al, CHEMICAL PROCESSING OF ADVANCED MATERIALS, Effects of Structure and surface Area on bioactive Powders by Sol-Gel Process, Vol. 56, 1992, pp. 627-633
	Malkin et al, JOURNAL OF CRYSTAL GROWTH, Crystallization of Stellite tobacco Mosaic Virus I. Nucleation Phenomena, Vol. 126, 1993, pp. 544-554
	McPherson and Schlichta, Heterogeneous and Epitaxial Nucleation of Protein Crystals on Mineral Surfaces, Vol. 239, 1988, pp. 385-387
	Orefice et al, JOURNAL OF BIOMEDICAL MATERIAL RESEARCH, Novel Sol-Gel Bioactive Fibers, Vol. 55, 2001, pp. 460-467
	Pereira & Hench, JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, Mechanisms of Hydroxyapatite Formation on Porous Gel-Silica Substrates, Vol. 7, 1996, pp. 59-68

EXAMINER	<i>J. Chayen</i>	DATE CONSIDERED	8/28/06
----------	------------------	-----------------	---------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)		Document Number 20050515.ORI	Application Number 10/019,520
		Applicant Naomi Chayen et al	
		Filing Date May 6, 2005	Group Art Unit 1222

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
------------------	-----------------	------	------	-------	----------	----------------------------

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
--	-----------------	------	---------	-------	----------	---

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

<i>5/14</i>	Roether et al, BIOMATERIALS, Development and in vitro Characterisation of Novel Bioresorbable and Bioactive Composite Materials Based on Polylactide Foams and Bioglass for Tissue Engineering Applications, Vol. 23, 2002, pp. 3871-3878
	Rosenberger et al, JOURNAL OF CRYSTAL GROWTH, Temperature Dependence of Protein Solubility - Determination and Application to Crystallization in X-ray Capillaries, Vol. 129, 1993, pp. 1-12
	Sanjoh et al, JOURNAL OF CRYSTAL GROWTH, Spatiotemporal Protein Crystal Growth Studies Using Microfluidic Silicon Devices, Vol. 196, 1999, pp. 691-702
	Sanjoh et al. JOURNAL OF CRYSTAL GROWTH, Surface-potential Controlled Si-microarray Devices for Heterogeneous Protein Crystallization Screening, Vol. 232, 2001, pp. 618-628
	Saravanapavan and Hench, JOURNAL OF BIOMEDICAL MATERIAL RESEARCH, Low-Temperature synthesis, Structure, and Bioactivity of Gel-Derived Glasses in the Binary CaO-Sio ₂ System, Vol. 54, 2001, pp. 608-618
	Sepulveda et al, JOURNAL OF BIOMEDICAL MATERIAL RESEARCH, Bioactive Sol-Gel Foams for Tissue Repair, Vol. 59, 2002, pp. 340-348
	Sing et al, PURE AND APPL. CHEM., Reporting Physisorption Data for Gas/Solid Systems, Vol. 57, 1985, pp. 603-619
	Stamboulis et al, ADVANCED ENGINEERING MATERIALS, Novel Biodegradable Polymer/Bioactive Glass Composites for Tissue Engineering Applications, Vol. 4, No. 3, 2002, pp. 105-109
<i>5/14</i>	Stura, PROTEIN CRYSTALLIZATION: TECHNIQUES, STRATEGIES AND TIPS, (ed. Bergfors, T.M.) (International University Line, LaJolla; 1999)

EXAMINER	<i>S. Babbush</i>	DATE CONSIDERED
----------	-------------------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)		Document Number 20050515.ORI	Application Number 10/019,520
		Applicant Naomi Chayen et al	
		Filing Date May 6, 2005	Group Art Unit 1722

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
------------------	-----------------	------	------	-------	----------	----------------------------

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES	NO
--	-----------------	------	---------	-------	----------	-----------------	----

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

<i>Fth</i>	Visuri et al, BIO/TECHNOLOGY, A New Method for Protein Crystallization Using High Pressure, Vol. 8, 1990, pp. 547-549
	Chayen et al, ACTA CRYST., Protein crystallization for Genomics: towards High-throughput Optimization Techniques, Vol. 58, 2002, pp. 921-927
	Chayen et al, JOURNAL OF MOLECULAR BIOLOGY, Porous Silicon: An Effective Nucleation-inducing Material for Protein Crystallization, Vol. 312, 2001, pp. 591-595
	Sakamoto et al, NATURE, Direct Imaging of the Pores and Cages of Three-Dimensional Mesoporous Materials, Vol. 408, 2000, pp. 449-453
	Saridakis et al, ACTA CRYST, Separating Nucleation and Growth in Protein Crystallization Using Dynamic Light Scattering, Vol. 58, 2002, pp. 1597-1600
	Wiencek, ANNU. REV. BIOMED. ENG., New Strategies for Protein Crystal Growth, Vol. 1, 1999, pp. 505-534
	Fabbri et al, BIOMATERIALS, Hydroxyapatite-based Porous Aggregates: Physico-Chemical Nature, Structure, Texture and Architecture, Vol. 16, 1995, pp. 225-228
	Drenth, J. (1994), PRINCIPLES OF PROTEIN X-RAY CRYSTALLOGRAPHY, Springer-Verlag, New York (Textbook, copy not provided)
	Hench, L.L. (1998), SOL-GEL SILICAS, Hayes Publishing Co., New York (Textbook, copy not provided)
	Iler, R.K. (1979), THE CHEMISTRY OF SILICA, J Wiley & Sons, New York (Textbook, copy not provided)

EXAMINER <i>L. Shlesher</i>	DATE CONSIDERED <i>7/22/06</i>
-----------------------------	--------------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.